

ABSTRACT

An analog front end circuit comprises a variable gain amplifier circuit (VGA circuit), a first sample switch, a second sample switch, a hold switch and an analog to digital converter device. The VGA circuit comprises a first input end, a second input end, and at least one output end. The first input end is used for receiving first voltage level signals. The second input end is used for receiving first reference signals. The output end is used for outputting at least one amplified signal. While the first sample switch is at a first conductive state, the first input end receives the first voltage level signal. While the second sample switch is at the first conductive state, the second input end receives the first reference signal. Finally, while the hold switch is at a second conductive state, the output end outputs the amplified signal.